



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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JUN - 2 2014

OFFICE OF
COMPLIANCE AND ENFORCEMENT

Reply to: OCE-084

Certified Mail Return Receipt Requested

Ms. Lisa Arkin
Executive Director
Beyond Toxics
P. O. Box 1106
Eugene, Oregon 97440

Re: December 12, 2013 Petition for Community Epidemiological Investigation
Curry County, Oregon

Dear Ms. Arkin:

I am writing in response to your December 12, 2013 petition to the Environmental Protection Agency (EPA) in which you described your concerns regarding the aerial applications of herbicides on timber lands near Gold Beach and Cedar Valley, Oregon. Specifically, you requested that EPA: (1) review and evaluate the Oregon Department of Agriculture's (ODA) investigation of the Gold Beach and Cedar Valley's complaints regarding aerial spraying; (2) require label restrictions on herbicides and adjuvants that are utilized within five miles of a "vulnerable area;" (3) evaluate whether the aerial applications of October 16, 2013 violated the provisions of the Clean Water Act (CWA) or the Endangered Species Act (ESA); and (4) analyze the Oregon Forest Practices Act against the CWA, the Clean Air Act (CAA) and the ESA.

EPA Region 10 has been working with the Agency for Toxic Substances and Disease Registry (ATDSR), ODA, EPA Headquarters and several EPA Region 10 Offices in an attempt to address and answer your petition.

1) Request for EPA to Review and Evaluate ODA's Investigation of the Gold Beach and Cedar Valley's complaint

You requested that EPA review and evaluate ODA's investigation of the Gold Beach and Cedar Valley complaints. We have been in direct communication with ODA since the beginning of the incident. We have held several conference calls on the progress of the investigation, spent two days at the ODA Salem office speaking with the lead investigators and thoroughly reviewing the preliminary case file, and conducted a site visit in the Gold Beach area to speak with ODA, Crook Timber, and concerned residents. Based on these activities, we feel that ODA has conducted a complete and thorough pesticide investigation of the October 16, 2013 complaints.

2) Request for further label restrictions on herbicides for use within five miles of a "vulnerable area"

You requested that EPA require label restrictions on herbicides and adjuvants that are utilized within five miles of a "vulnerable area." We understand your concerns and the need to feel protected from

risks posed by pesticide exposure. EPA has a number of processes in place that directly address these types of concerns.

First: EPA conducts an extensive review of each and every pesticide (including herbicides) prior to determining if it should be registered and what uses are allowed. The EPA bases its determination on an assessment of risks that includes scrutiny of product ingredients; the site or crop on which it is to be used; the amount, frequency and timing of its use; and storage and disposal practices. Directions for use and precautionary statements on the product label must be written in such a way that, when adhered to, allow the pesticide to be used without posing unreasonable adverse effects on humans and the environment, including non-target species.

Second: EPA currently is in the midst of a periodic re-evaluation of all registered pesticide active ingredients, mandated by FIFRA section 3(g) to occur in 15-year cycles (now in the first cycle). This periodic re-evaluation, or "registration review," is intended to keep pace with scientific developments and evolving EPA policy on pesticides. Registration review culminates with a decision about whether or not the pesticide under review continues to meet statutory standards, and if not, how the risks associated with the use can be mitigated.

Registration review is conducted on a case-by-case basis so that EPA's decisions can be based on the risks associated with individual pesticides. In general, the Agency does not believe that across-the-board (as opposed to case-by-case) actions, such as uniform-sized buffers around areas treated with pesticides, are effective or scientifically defensible.¹ EPA recently published for public comment a draft method for assessing the risks associated with pesticide drift,² and is currently using that method in registration review. From now forward, every pesticide re-evaluation will include an assessment of the risks posed by pesticide drift to bystanders—people who live, work, go to school, or play in close proximity to areas where the subject pesticide is applied. If mitigation is necessary, implementing buffers around areas where pesticides are sprayed is one means of reducing the potential of bystanders to be exposed to pesticide drift. Other approaches may include reductions in application rates or prohibitions on aerial application.

The registration review schedule, and information on the results of past reviews can be found on Office of Pesticide Program's website.³

EPA recognizes that weather and topographic factors unique to your part of Oregon and elsewhere may not be addressed specifically in our risk assessments. EPA uses "worst-case scenarios" and other conservative assumptions in its risk assessments to ensure that the results of the assessments are protective of a wide variety of conditions. Equally important, EPA reviews and considers incident reports from communities like Gold Beach and Cedar Valley where people may have been affected by pesticide drift to determine if further regulatory action is necessary. The Office of Pesticide Programs has been paying serious attention to these incidents and encourages people to report specific occurrences of drift or other pesticide exposures to them, their families, their pets, livestock, gardens, and farms,

¹ The Agency recently replied to a petition from a number of farmworker and environmental advocacy organizations that asked, among other things, that the Agency require specific buffers around areas treated with a particular set of pesticides. The Agency's response to that petition expands on the buffer discussion. The petition and the response can be found at <http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OPP-2009-0825>.

² <http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OPP-2013-0676>

³ http://www.epa.gov/oppsrrd1/registration_review/schedule.htm,
<http://iaspub.epa.gov/apex/pesticides/f?p=CHEMICALSEARCH:1:0::NO:1>

wildlife, or natural resources to state and local authorities and to the National Pesticide Information Center⁴ so they can be reviewed and considered (e.g., during registration review).

3) Request for EPA to determine whether the aerial applications violated the CWA or the ESA

You also requested that EPA evaluate whether the aerial applications of October 16, 2013 violated the provisions of the CWA or the ESA. As you know, ODA took seven samples across four residences during their investigation of the aerial application by Pacific Air Research (PAR). The results showed that two out of the seven samples had chemical residues matching the active ingredients found in the tank mix prepared by PAR. These samples were collected from trees and shrubs in residential yards, not from the creek that runs through Cedar Valley. This is the standard sampling procedures for determining if pesticides moved off target because trees and shrubs do not move and will more likely retain product that drifts onto them. If the pesticides did contact the creek water, the concentration would have to exceed the water quality bench mark established by the Oregon Department of Environmental Quality (ODEQ) for the application to have violated the CWA. ODEQ has only established a water quality bench mark for 2,4-D, one of the two active ingredients found in the neighborhood. The water quality bench marks for 2,4-D is 100 micrograms per liter or 100 parts per billion (ppb). EPA's acute Human Health Benchmark for triclopyr in drinking water is 1650 ppb (see <http://iaspub.epa.gov/apex/pesticides/f?p=HHBP:home>). Although ODA foliage samples cannot be compared directly to water quality criteria, for perspective, the largest residue concentration found on the residential properties was 11 ppb triclopyr and 16 ppb 2,4-D. These numbers are below EPA's Human Health Benchmark for triclopyr and ODEQ's water quality benchmark for 2, 4-D. Granted, these values were from samples collected 6 days after the application and are therefore, lower than what would be expected at the time of the application. However, we still do not have any conclusive evidence that the October 16, 2013 application violated the CWA. If you have additional questions or would like more information on CWA violations in Oregon, please contact ODEQ at (503) 229-6691.

In regards to your claims concerning possible violations of the ESA, EPA does not have the authority under the ESA to make a determination of a violation of that Act or take any enforcement action under the ESA. The ESA is administered by the United States Department of Commerce's National Marine Fisheries Service (NMFS) and the United States Department of Interior's Fish and Wildlife Service (FWS) (collectively "the Services"). However, if EPA had information related to a violation of the ESA due to an application of a pesticide, the Agency would share it with the Services. To date, EPA has not received this type of information to share with the Services.

4) Request for EPA to analyze whether the Oregon Forest Practices Act complies with the CWA or the ESA

Finally, you also requested EPA to analyze the Oregon Forest Practices Act against the CWA, CAA and ESA. Unlike the EPA's review of state programs that it authorizes under the CWA or the CAA, Oregon's Forest Practices Act (FPA) is a state law, not under the purview of the EPA, therefore an evaluation against the CWA, CAA, and the ESA is not conducted prior to the state's adoption and implementation. A cursory review of the FPA does not reveal that it contradicts any of these statutes. EPA understands that forest operations⁵ must be in compliance with Oregon Department of Environmental Quality's (ODEQ) rules and regulations, including those relating to air and water

⁴ <http://npic.orst.edu/>; telephone (800) 858-7378

⁵ Operations are defined by ORS 527.620 found at <http://www.oregonlaws.org/ors/527.620>

pollution control (OAR 629-605-0130). Rules and regulations adopted by ODEQ must be at least as stringent as the federal requirements (under CWA and CAA) in order for the state to have received authorization to implement CWA (NPDES Permitting) and CAA (Stationary Source Permitting, Woodstoves, NESHAPs Asbestos) programs.

From what we understand, implementing rules developed under the FPA have considered the CWA and ESA after they were introduced in Oregon legislative sessions and Senate Bills. For example, legislation in 1991 (Senate Bill 1125) required the Oregon Department of Forestry (ODF) determine the cumulative effects of forestry on air, water, soil, fish, and natural resources. This resulted in state stream protection rules (OAR 629-635 to 660) that include best management practices for protecting streams and meeting water quality standards (temperature, turbidity and anti-degradation).

In closing, EPA Region 10 will continue to work with the agencies involved in investigating the October 2013 herbicide applications including the ATSDR, ODA, ODF, Oregon Health Authority to ensure any enforcement issues are fully evaluated. I appreciate your concerns and the assistance you are providing to the Oregon residents located within Gold Beach and Cedar Valley. If you have additional questions, please contact me at 206-553-1679 or by email at mcfadden.kelly@epa.gov or Chad Schulze, FIFRA case officer at 206-553-0505 or by email at schulze.chad@epa.gov.

Sincerely,



Kelly McFadden, Manager
Pesticides and Toxics Unit

cc: John and Barbara Burns
Keith Wright
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